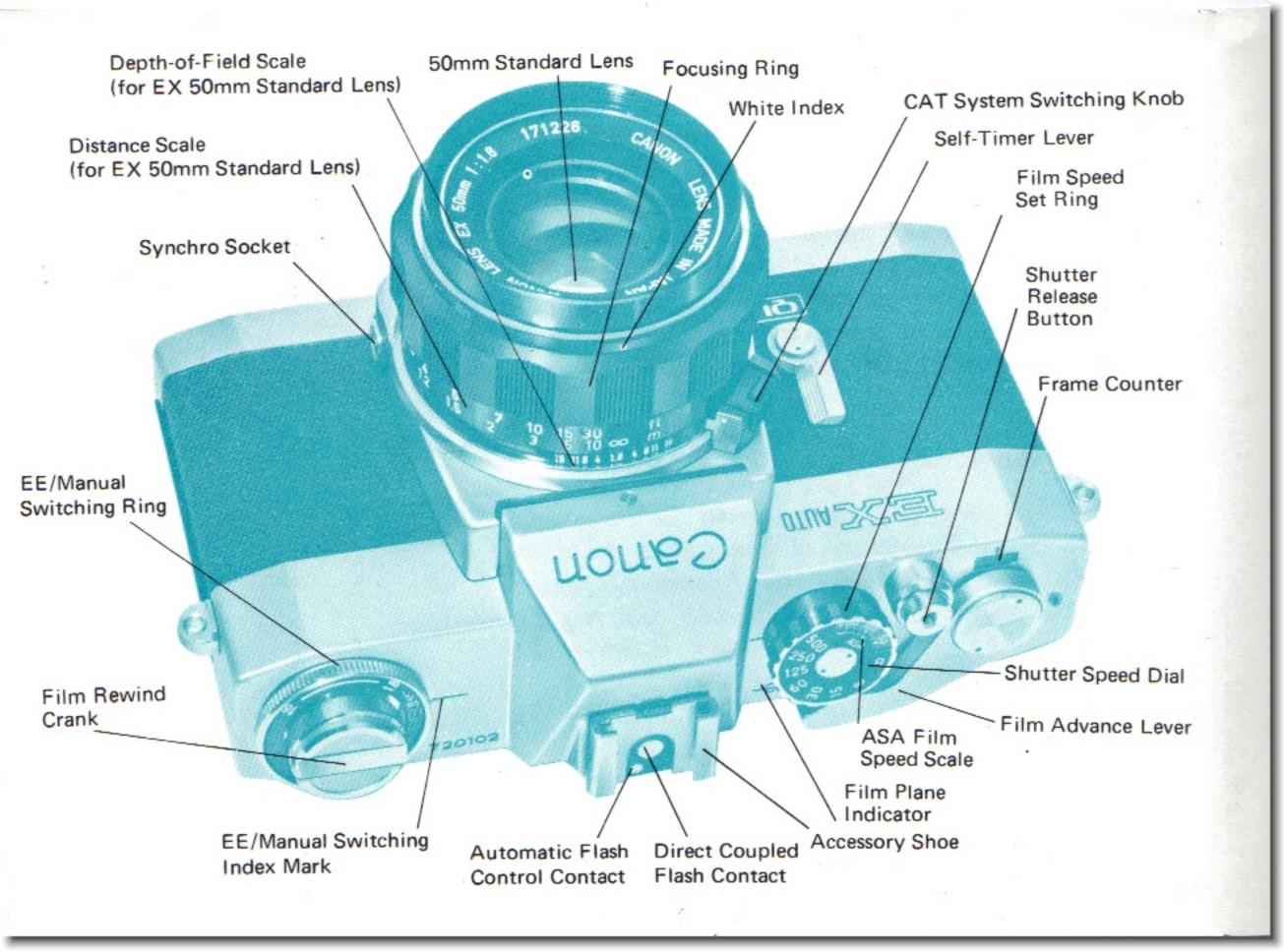
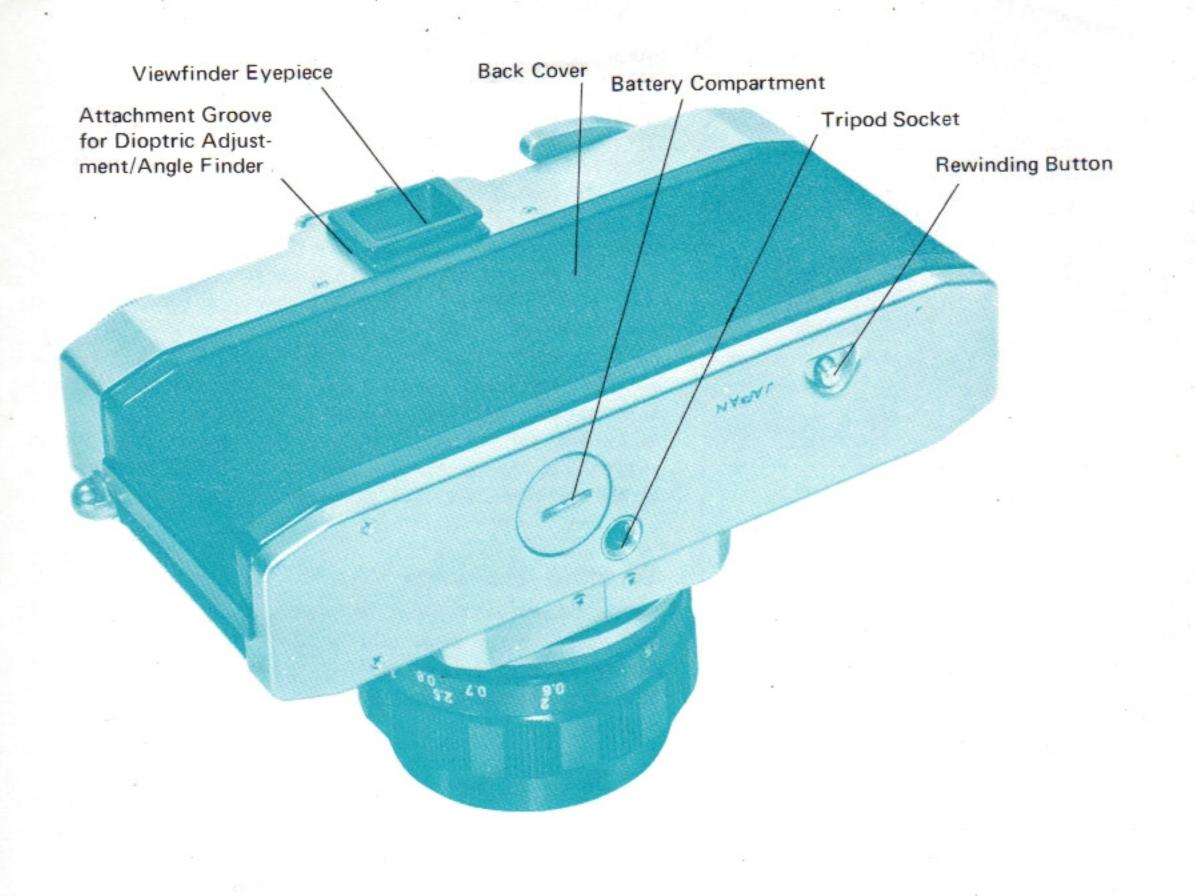
Camon 定窓MO

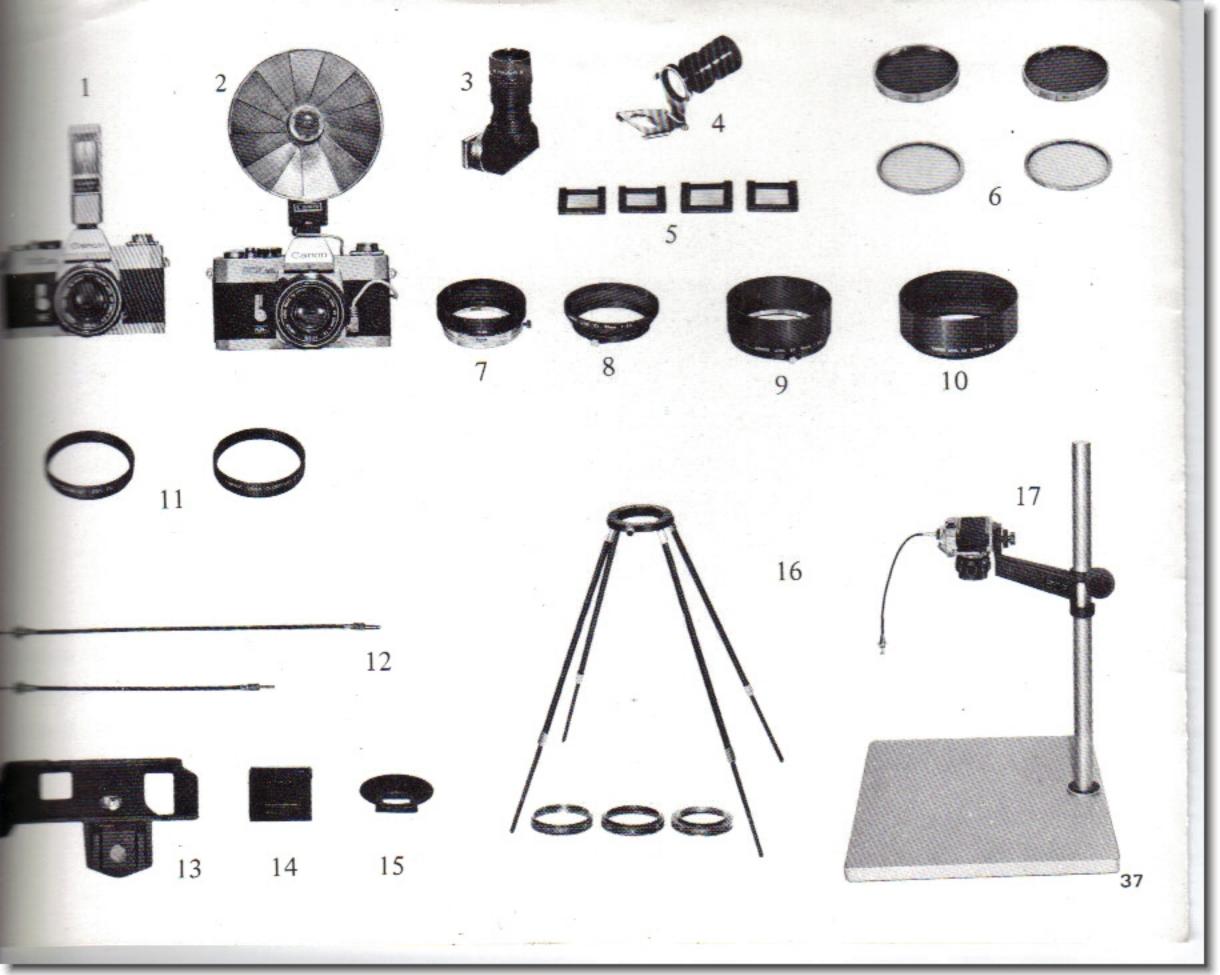
INSTRUCTIONS

Canon

English Edition







llow these simple steps for normal otography with Electric Eye:

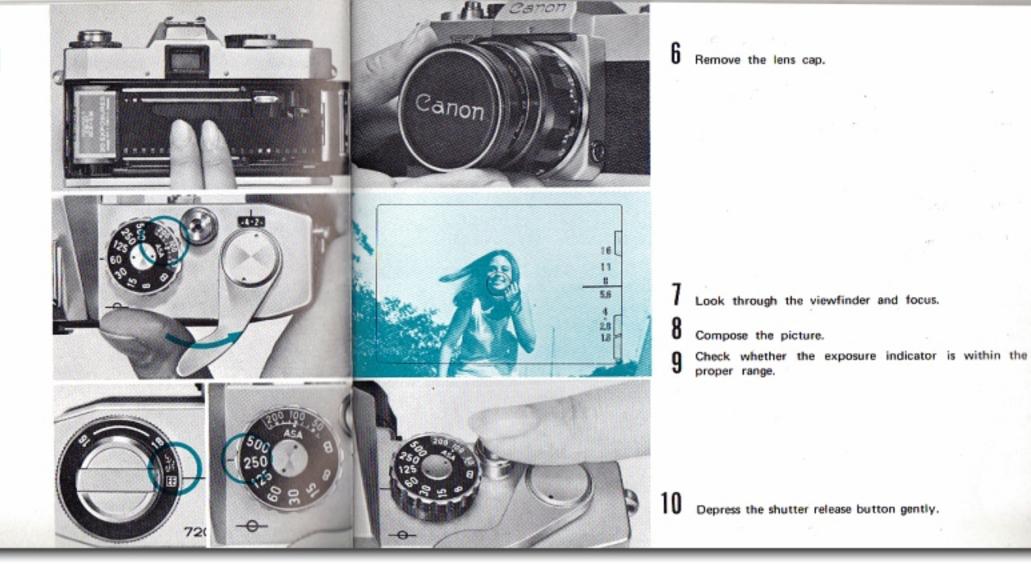
Load the film simply with the QL mechanism.

Set the ASA film speed.

Wind the film advance lever.

Turn the aperture control ring to "EE".

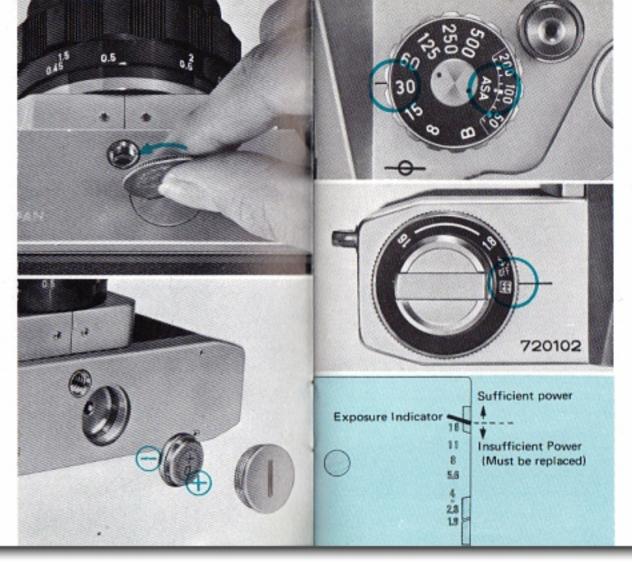
Select your desired shutter speed.



Mercury Battery Loading and Checking

Before using your new Canon EX AUTO, load it with the nercury battery packed in a separate envelope. The Electric Eye functions only when the battery is properly loaded.

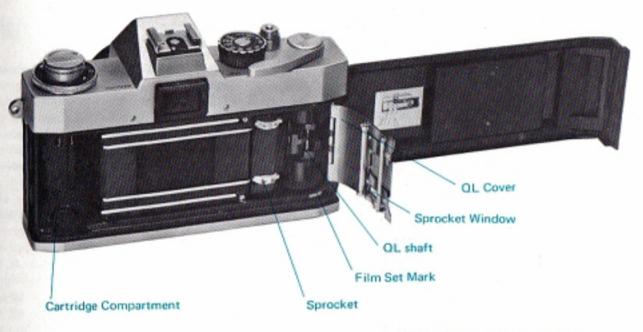
- Insert a coin into the groove of the battery compart-
- 2 Face the central contact of the mercury battery inwards and insert.
- n Replace the cover by turning it to the right.
- Before inserting, wipe all battery poles clean of fingerprints or stains with a dry cloth. Unclean poles may cause corrosion and damage the contact points of the camera.
- A 1.3v M20 (#625) mercury battery should be used equivalent to Mallory PX-625, Eveready EPX-625, Burgess Hg-625R.
- Be sure to insert the battery in the correct direction by referring to the diagram on the compartment cover. Otherwise, the cover cannot be screwed in and the Electric Eye will not function properly.
- When the camera is not used for a long period, remove the mercury battery and keep in a dry place.



Battery Check

To check the power level of the mercury battery :

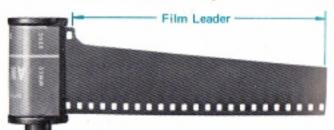
- 1 Set the film speed scale at ASA 100, the shutter speed dial at the "30" index. For the film speed setting, up the outer ring of the shutter speed dial and turn.
- 2 Turn the EE/Manual switching ring to "EE" and aim to camera at the sky or other bright subject. If the exposit indicator inside the viewfinder swings up to and over "16" index, the battery has sufficient power. Otherwithe battery must be replaced.
- Life of the battery in normal use is approximately of year. It is advisable to replace the battery when one yearses after loading.

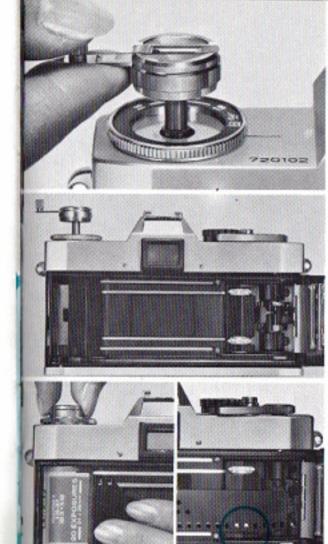


Direction in which film is placed (emulsified surface facing the back of the lens)









Film Loading

The Canon EX AUTO accepts any standard 35mm film in cartridge for daylight loading. When loading a new fill always avoid direct sunlight.

1 Raise the film rewind crank and pull it all the way The cover will rise slightly.

2 Open the cover fully. When the back cover is open the QL cover opens simultaneously.

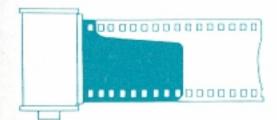
The QL cover automatically opens and closes with back cover. Do not touch the QL cover.

3 Face the film cartridge as illustrated, and insert it is the cartridge compartment. Push the crank back to former position again. The crank fork will slip into the state of the film cartridge. In case the crank does not fully retuturn it slightly to the left or right.

4 Hold the film cartridge down with the left hand so t it does not rise, and lay the tip of the leader above "red" film set mark. Bring down the QL cover to hold the film in place by closing the back cover. Look through the sprocket window o see if the film is correctly engaged on the sprocket.

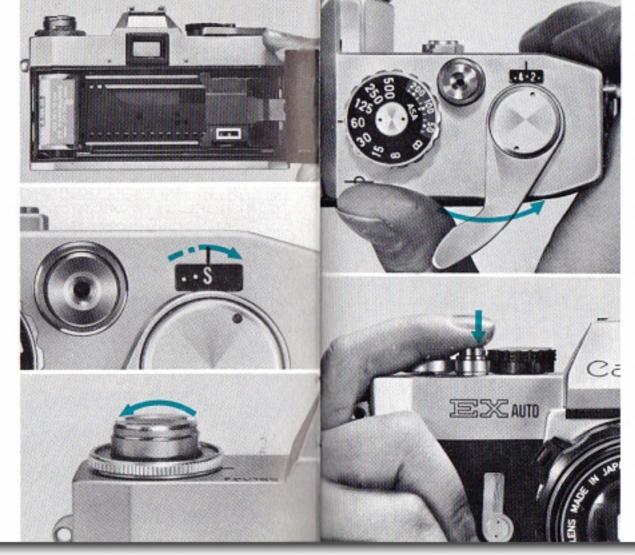
Close the back cover by pressing down on the cover.

- If the film is sagging, the cartridge will rise and the back cover will not close.
- Leave the lens cap on and make three blank shots, each time turning the film advance lever. The frame counter will advance from the "S" mark to "O". With one more advance, the camera will be ready for the first shot.
- When repacking a long-wound film for darkroom loading nto an ordinary cartridge, be sure to trim the tip of the eader between perforations.



Checking Correct Film Loading

The film is properly loaded and advanced if the film rewind trank rotates when you wind the film advance lever. If the rewind crank does not rotate, take out the film as explained on the following page, and reload.



Film Winding

The film advance lever winds the film, cocks the shutt and prepares the mirror for the next shutter release all one motion.

- 1 Turn the film advance lever until it stops. The fill will be advanced one frame and the shutter cocket. The frame counter is simultaneously advanced to the negumber.
- 2 When the shutter release button is depressed, the minimum of the proper f/stop (in case of manual control, to the pref/stop) and the shutter operates. After the shutter is operate the advance lever can be wound for the next frame.
- Winding may be done by moving the lever with seven short strokes.
- After loading the film, make another wind, because of with the first wind it may not be completed.
- The shutter will not function when depressing the shut release, button unless the winding is completed. In su a case, check the winding once more.

Frame Counter

Each winding will advance the number of the frame count indicating the number of pictures taken. When the ba cover is opened, the indicator automatically returns to start position "S".

Im Speed Setting

nen loading the film, be sure to set the film speed scale the proper position.

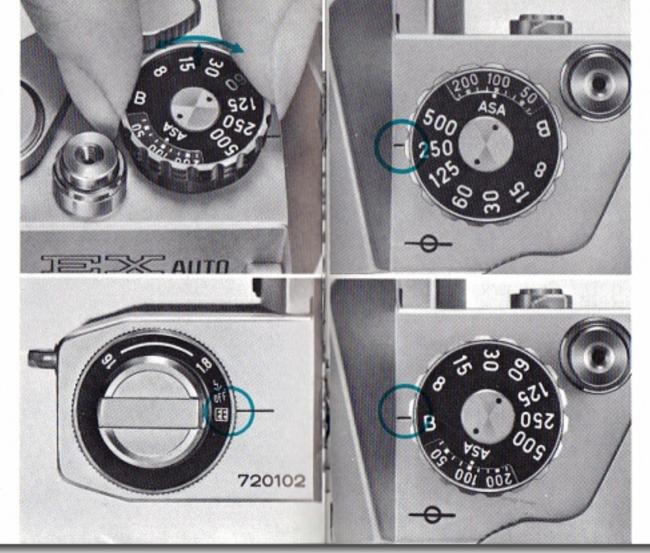
It the film speed set ring around the shutter speed dial, diset the proper ASA film speed number.

The film speed is indicated on the film box or on the truction sheet.

otography with Electric Eye

r taking pictures with Electric Eye, set the aperture control at "EE".

The Electric Eye is fully coupled to the ASA film speed, shutter speed and the aperture. The diaphragm will se down to the proper f/stop and exact exposure is termined by simply depressing the shutter release button.



Shutter Speed Adjustment

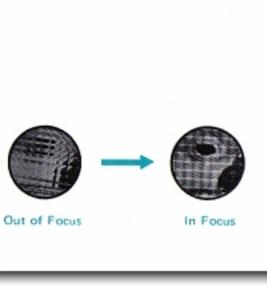
Adjust the shutter speed by turning the shutter speed of to the desired index number. The index on the dial sho the denominators of 1/500 sec., 1/250 sec., etc.

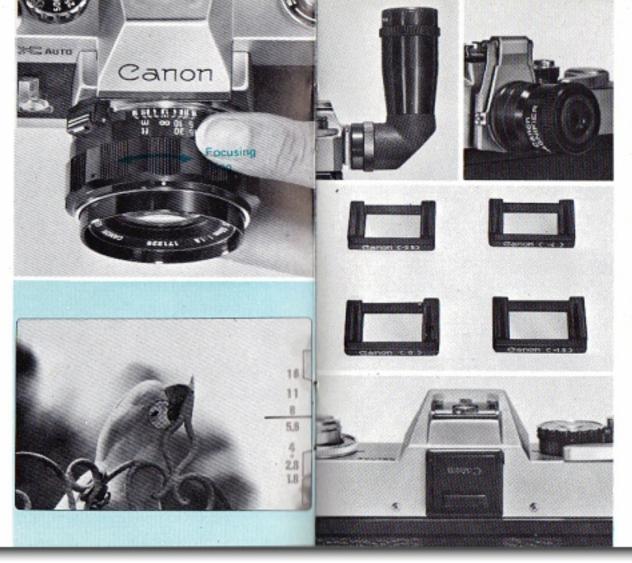
- Be sure to set the index at a position where the clin stop catches.
- "B" indicates bulb exposure, and is used when make indefinite timed exposures. When the shutter speed of is set at "B", the shutter remains open as long as the shut release button is depressed.
- Time exposure, making an exposure over an extend time, is possible by using the lockable cable release a setting the shutter speed dial at "B".
- The "60" index is used for synchronizing an electroflash unit such as Canolite D. Although the shutter spe at "60" is 1/60 sec., it is equivalent to a very short expositime during the flash of the electronic flash unit.

ocusing

he center of the viewfinder (circular section) is a microrism screen rangefinder made up of microscopic prisms for ast and precise focusing.

hile looking through the viewfinder, rotate the focusing ng. It is in focus when the image in the rangefinder becomes harp and clear.





Viewfinder

The exact picture image to be photographed can be clear seen through the viewfinder without any parallax. The enables you to determine the exact composition of you scene before depressing the shutter release button.

- Canon Angle Finder A can be attached to the eyepie for copying and close-up photographies. In these case images are reversed between left and right.
- The Canon Magnifier can be attached to the viewfind eyepiece of the Canon EX AUTO, with the separately available adapter which magnifies the rangefinder section for accurate focusing. Because it can be sprung up and clamped, the entire field of view can easily be viewed after focusing.
- Dioptric adjustment lenses are available as optional attachments. When a dioptric adjustment lens is attached to the viewfinder eyepiece, those who are far-or near-sighted catake pictures without glasses. Four different diopters +1.5, 0, -2.5 and -4 are available.
- When photographing without the eye close to the eyepie such as when using the self-timer, use the accessory sho eyepiece cover to prevent the incorrect exposure caused by the influence of the reverse incoming light entering the eyepiece.

Checking the Exposure Indicator

Furn the aperture control ring to "EE". Point the camera it the subject and check the position of the exposure indicator inside the viewfinder.

You may depress the shutter release button if the indicator is pointing inside the proper exposure range.

If the indicator is pointing to the over-exposure warning mark, either the shutter speed dial should be revolved to the higher index side until the indicator moves to the proper exposure range, or a neutral density (ND) filter must be attached to restrict the incoming light.

If the indicator is pointing to the under-exposure warning mark, either the shutter speed dial should be revolved intil the indicator moves to the proper exposure range, or ight source must be increased.

- Upper splitted part of the under-exposure warning mark pplies only to the F3.5 lenses, i.e., the 35mm wide-angle, 15mm and 125mm telephoto lenses.
- The Electric Eye mechanism functions only when the perture control ring is set at "EE".



Coupling Range of the Electric Eye

The Electric Eye couples to the following range of f/sto and shutter speeds with respective film speeds. When us the 50mm standard lens and ASA 100 film, for examp the Electric Eye couples fully within the range of f/st 1/8 sec. and f/16 at 1/500 sec.

- The Electric Eye does not function at "B" of the shut speed dial because "B" is used for indefinite timed exposures.
- When the Electric Eye is outside the coupling ran the exposure indicator will point to the over/under exposi warning mark, and will indicate that proper exposure can be obtained.

Chart of Coupling Range of the Electric Eye

EX50mmF1.8, EX35mmF3.5, EX95mmF3.5, EX125mmF3

ASA	Shutter Speed							
25-40			1/8	1/15	1/30	1/60	1/125	1/2
50-80		1/8	1/15	1/30	1/60	1/125	1/250	1/5
100	1/8	1/15	1/30	1/60	1/125	1/250	1/500	
125-200	1/15	1/30	1/60	1/125	1/250	1/500		
250-400	1/30	1/60	1/120	1/250	1/500			
500-800	1/60	1/125	1/250	1/500				

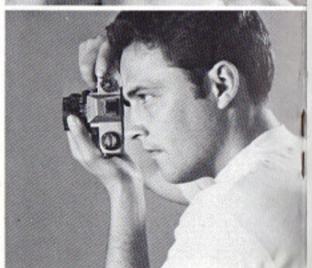
. The vacant spaces do not couple with the Electric Eye.

Camera Holding and Shutter Release

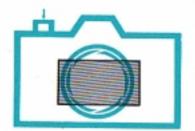
Hold the camera firmly in order to take a clear picture. Hold the camera either in a vertical or horizontal position, look through the viewfinder, and focus. Then press the shutter release button gently. The following steps are important.

- 1 Hold the camera snugly in both hands. The camera should be pressed firmly to your cheek or forehead.
- When the camera is in a horizontal position, both elbows should be firmly pressed against the body, and at least one elbow should be resting against the body when in a vertical position.
- 3 Hold your breath and press the shutter release button with a smooth, steady stroke. Otherwise, you will have a blurred picture.
- When using slow shutter speeds below 1/30sec, the use of a tripod and cable release is recommended.
- When taking pictures against the light, always use a lens hood.





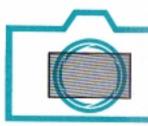
Relationship Between the Shutter, Diaphragm, and Mirror



Press the shutter release button.



The diaphragm closes down to the f/stop designated by Electric Eye and the shutter clicks.



The diaphragm returns to maximum opening.



Mirror begins to flip up...



Mirror is up.



Mirror returns to the former position.

Film Rewinding

When the film reaches the end and the film advance lever tops, rewind the film into the cartridge as soon as possible. Be sure not to open the back cover before rewinding. Otherwise, the entire roll will be exposed and ruined as the exposed film is naked within the camera.

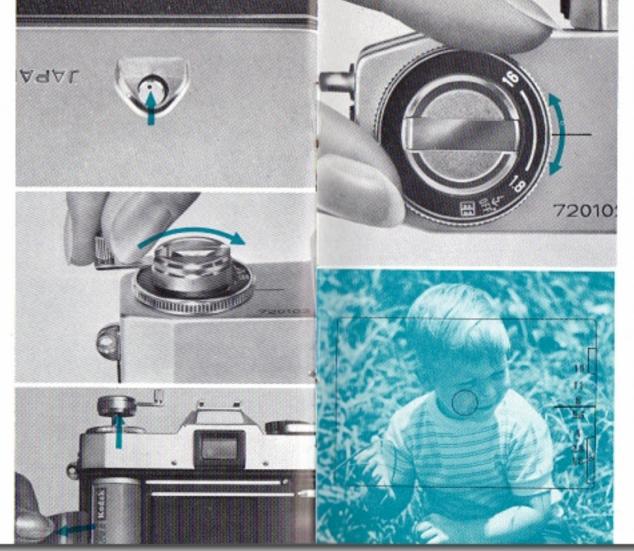
1 Press in the rewinding button.

Raise the film rewind crank, turn it in the direction of the arrow, and rewind the film into the cartridge. When the rewinding button stops revolving and rewinding resistance secomes light, stop rewinding immediately.

Open the back cover by pulling up the rewind knob fully.

Remove the cartridge.

- Once the rewinding button has been pressed, the finger may be removed. The button will pop out automatically when the film advance lever is wound.
- If you force the film advance lever after the film reaches ts end, the film will become detached from the cartridge pool or tear, and rewinding will become impossible. If his happens, open the back cover and remove the film only in a darkroom.



Manual Control of Aperture

Incoming light and depth-of-field can be manually control by turning the aperture control ring to the direction "1.8-16". The exposure indicator in the viewfinder mo to indicate the pre-set f/stop. Use this method when us the flash unit, photographing in counter-lighted situati or stressing high-key/low-key effects.

- The diaphragm will close down to the pre-set f/s only for the instant that the shutter is released. Exc for that instant, the diaphragm remains fully open.
- As the f/stop value gets larger, the amount of light reach the film plane becomes correspondingly less. For each f/s up, the light is reduced one-half. Accordingly, when aperture is increased by one f/stop, the exposure is doubl and when it is increased by two f/stops the exposure quadrupled.
- The ratio between the aperture and the amount of exposu using f/2 as the basis, is as follows: f/stop :

1.8 (2) 2.8 3.5 Exposure Ratio:

1.25 1 1/2 1/3 1/4 1/8 1/16 1/32 1/64



m Telephoto Lens

95mm Telephoto Lens

50mm Standard Lens

35mm Wide-Angle Lens





Uses of Lenses

The lenses are of the front component convertible typ The rear component of the optical system and diaphrag are built into the camera body.

Changing Lenses

- Remove the front component of the lens by turni it counterclockwise.
- 7 Turn the focusing ring clockwise as far as possible, and : L the infinity mark (∞) of the distance scale on the came body side at the orange line indicator.
- n Mount the lens to be replaced by turning clockwise un J it is securely in place.
- Attach the lens quickly in the shade. The film w sometimes become foggy if the lens is left unattached.
- Whenever a lens is removed, be sure to put on its le cap and dust cap.

etting Distance Scale of 35mm, 95mm and 25mm Lenses

nen using the 35mm wide-angle, 95mm or 125mm telephotons, be sure to set its distance scale on the front component openly.

After replacing the lens, set the infinity mark (:0) of the distance scale on the camera body side at the orange in indicator.

Rotate the distance scale on the front component and set the infinity mark (2) of the distance scale for the mm, 95mm or 125mm lens at the white index on the cusing ring.

Set the focus by turning the focusing ring. Read the distance scale on the front component with the white dex.

When using the 95mm or 125mm lens, focus precisely are the depth-of-field is shallow.

Be sure not to turn the adjusted distance scale on the ont component. If the position of the distance scale is oved, correct distance cannot be read off.

istance Scale

bject and the film plane. The scale is used for checking e depth-of-field, for flash and infrared photographies.

The correct position of the scale is in the center of ch value. For example, the correct position of a two-digit lue is the center of the two figures.



Depth-of-Field Scale

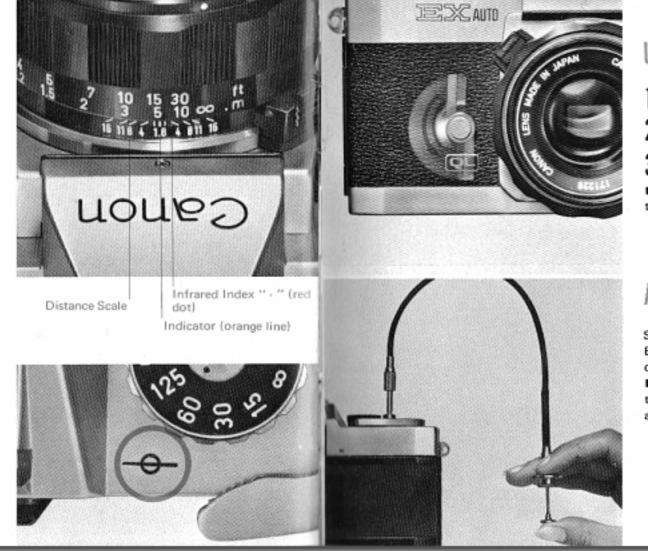
The depth-of-field scale which is applicable when using the 50mm standard lens, indicates the range of subjects which will be in focus sharply on the film. This range will vary with the following factors : The depth-of-field will be deeper the smaller the aperture opening, the further the distance of the subject, and/or the shorter the lens focal length. The depth-of-field will be shallower the larger the aperture opening, the nearer the distance of the subject. and/or the longer the lens focal length. For example, if the 50mm standard lens is used and the subject has been focused at a distance of 3m (10'), with an f/8 aperture value read off from both indexes on either side of the indicator (orange line), the depth-of-field is from approximately 2.3ml (8') to 4.3m (14'). If the aperture is closed down to f/16. the picture will become sharp between 1.9m (6') to 7.6m (25') from the camera. This range will vary with the f/stop selected.

frared Photography

r infrared photography, correction of the distance scale necessary because the focal point slightly deviates from dinary photography. When using the 50mm standard lens, the first in the ordinary manner, then adjust the distance lie to the infrared mark "·" (red dot). For instance, if the stance scale reads at 10m after focusing, merely shift the "10" lie to "·" (red dot) position. When using the 35mm wide-angle, a 95mm or the 125mm telephoto lens, focus first in the dinary manner, then shift the focusing ring counterclockwise lmm (1/16"), 3.5mm (1/8") and 5.1mm (3/16") respectively. The correction is based on using film with the highest we-length sensitivity figure of 800m μ , such as Kodak IR film and Wratten 87 filter.

Im Plane Indicator

en the focusing is done by actual measurement, read distance from the film plane indicator and interpret measured distance on to the distance scale.



Using Self-Timer

- 1 Wind the film advance lever. .
- 7 Turn the self-timer lever counterclockwise until it stops.
- 3 Depress the shutter release button. The shutter w be acturated approximately 10 seconds later.
- Be sure to wind the film advance lever. Otherwis the self-timer will act but the shutter will not be actuated.

Attaching the Cable Release

Separately available Canon Release can be attached to to EX AUTO by screwing it into the threaded hole in the cent of the shutter release button.

■ Be sure to attach the cable release before winding the film advance lever. Otherwise, the shutter may be advertently operated by screwing it into the socket.

lash Photography

utomatic Flash Photography

utomatic flash photography becomes possible when Canon's X50mm F1.8 lens and Canolite D are used in combination. he charge voltage of the electronic flash unit and the notographing distance enter the exposure meter circuit as gnals. Therefore, photography can be performed with cometely the same operations as in ordinary EE photography.

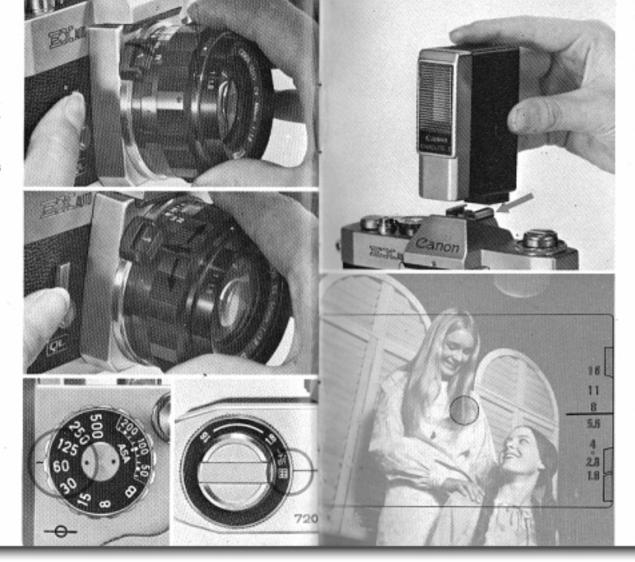
peration Procedure

Push down the CAT System switching knob so that it meshes and couples with the notch on the distance ring. Set the shutter speed dial at 60 and the EE/Manual switching ring at OFF.

Remove the electric shock prevention cover, attach Canolite D to the accessory shoe, and set the switch at ON.

Set the focus.

Check the exposure meter needle. When preparations have then completed for flashing with Canolite D, the exposure medle appears inside the EE exposure range. Gently press the utter release button for taking pictures. When the exposure medle remains inside the warning mark, it means the shooting stance is too far or too close or the charge of the electronic task is insufficient.



- The shutter can be released even when the exposure meter needle is inside the warning mark. However, in this case, the exposure will not be correct.
- During the time the shutter release button is being pressed, the exposure meter needle becomes stationary and does not indicate the proper exposure. Do not place your finger on the shutter release button until just before shooting.
- Automatic flash photography cannot be performed with any interchangeable lens other than Canon's EX50mm F1.8 lens. Use Canolite D in the same way as you would any ordinary flash unit.



lash Photography Using Ordinary Flash

hen performing flash photography other than autoatic flash photography, the f/number is obtained from the guide number of the electronic flash unit or flash alb, setting the aperture manually, and connecting the ord of the flash units to the synchro socket of the innera. The aperture is obtained from the following alculation expression.

(Aperture) = Guide Number + Photographing Distance

1/60 is used in common for X contact.

Flash units with direct-coupled flash contact can used.

Be careful not to touch the hot shoe contact with our hand when the cord of the flash unit is connected, ttach an electric shock prevention cover when a ash unit is not attached to the hot shoe.

Shutter Speed Bulb	В	1/8	1/15	1/30	1/60	1/125	1/250	1/50
FP Class	0	0	0	×	×	×	×	x
M Class	0	0	0	×	×	×	×	×
MF Class	0	0	0	×	×	×	×	×
Electronic Flash unit	0	0	0	0	0	×	×	×

X parts cannot be used.

Guide Number Calculation Chart for Canolite D (Unit:m)

	f/ stop	3.5	4	5.6 8	11		16
	ASA 100	3	2	1.5	1	0.8	0.6
Scale (m)	ASA 200		3	2	1.5	1	0.8
Distance Scale (m)	ASA 80		2	1.5	1 0.	8 0.6	5
	ASA 25	1.5	1	0.8	0.6		

When Using Canolite D besides the Ca

The guide number changes according to the ASA f speed. Therefore, the relation between photograph distance and f/number also changes according to film to be used. Here, we have indicated the comb tions of f/number and photographing distance of a speeds most frequently used. For example, when use a film with an ASA film speed of 100 and the photographing distance is 2 meters, the aperture is set between F4 and F5.6. The reverse method of giving priority the f/number is also possible.

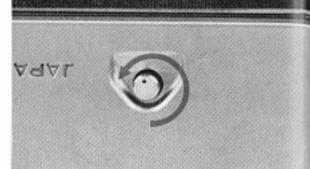
- Photography with proper exposure is possible e immediately after the pllot lamp lights up.
- The marginal light volume is slightly insuffic when using the EX35mm F3.5 lens, but this is warn able from a practical point of view.

Double Exposures

Although Canon EX AUTO is designed to prevent double exposures being made by mistake, a double exposure can be done by the following steps:

- 1 When the first exposure has been made, depress the rewinding button.
- n Rewind the film with the rewinding crank by watching the mark on the rewinding button carefully.
- Stop rewinding when the mark has made a 7/8 turn. J i.e., 270°.
- A Next, wind the film advance lever while lightly holding 4 the rewinding crank. When resistance is felt on the rewinding crank, stop winding.
- Wind the film advance lever once more. The camera is I ready for another exposure.
- By repeating the above process, any number of exposures on the same frame can be made. The frame counter will, however, continue to advance with each exposure.

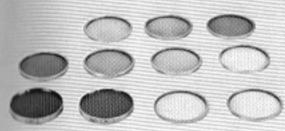






Filters

Various types of 48mm and 62mm screwin type filters are available for special effects in both color and black and white photography. Through-the-lens exposure measurement system of the Canon EX AUTO does not require exposure factor compensation.



	Type	Effectiveness of Filters
0	UV	Absorbs only ultra-violet rays. Especial effective at seaside, and in high mountal Recommended for use in color photograp
8	Y1* Y3	Increases contrast of black and white fi Enhances clouds, darkens the blue s Brightens red and yellow.
0	01*	Darkens blue, increases yellow and red p ceptibly. Good for contrasts especially distant landscapes.
0	R1	Makes strong contrasts. May also be us with infrared film.
0	G1*	Prevents red from turning radically in white. Lightens sky and face appropriate and reflects the lightness of fresh greens
0	ND 4 ND 8	ND 4 reduces light values by 1/4, ND 8 1/8. No effect on the reproduction of cold
•	SKYLIGHT	Acts to harmonize the blue sky and shade
•	CCA4*	For use with daylight type film under cloud.
•	CCA8*	For use with universal type (color negati film under the cloud or tungsten type f under the morning sun or sunset.
•	CCA (12 equiv.)	For use with tungsten type film under s light.
•	CCB 4 *	For use with daylight type film under morning sun or sunset.
•	CCB8*	For use with daylight type film and cle flash bulb.
•	CCB (12 equiv.)	For use with daylight type film under tu sten light.

* For 48mm filter only.

iterchangeable Lenses and Accessories

gh performance EX series lenses with the most often used cal lengths and various accessories are available to further hance your Canon EX AUTO.

iterchangeable Lenses

(50mm F 1.8 (Standard)

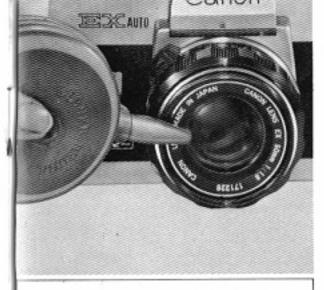
35mm F 3.5 (Wide angle)

(95mm F 3.5 (Telephoto)

(125mm F 3.5 (Telephoto)

Accessories

- 1 Canolite D
- 2 Flash V-3
- 3 Angle Finder A2, B
- 4 Magnifier S
- 5 Dioptric Adjustment Lenses
- 6 Filters (48mm, 62mm and 72mm screw-in type)
- 7 Lens Hood for EX 50mm F1.8 (S-50)
- 8 Lens Hood for EX 35mm F3.5 (W-50)
- 9 Lens Hood for EX 95mm F3.5 (T-65)
- 10 Lens Hood for EX 125mm F3.5 (Exclusive)
- 11 48mm (Close-Up Lenses 240, 450)
- 12 Canon Release 30/50
- 13 Camera Holder F
- 14 Accessory Shoe/Eyepiece Cover
- 15 SLR Eyecup S
- 16 Handy Stand F
- 17 Copy Stand 4



Camera Body Number	
Lens Number	
Date of Purchase	
Dealer's Name	

Proper Care of the Camera

Moisture and dust are harmful to your camera. If y camera is to be stored for a long time, it should be remoter from its case, and silica gel or another drying agent should be placed alongside it.

When you use your camera on a rainy day, or at the be moisture and salt air adhere to it, which can result in starust, and corrosion. Use a soft brush to get rid of a and a soft dry cloth for wiping.

- In extremely cold areas, expose the camera to the o air only when in use. When using, expose the camera gradu to the outer air to prevent the lens from clouding.
- In hot climates, do not leave the camera inside cli automobiles during the daytime or in direct sunlight. is not good for the CdS photocell.

Cleaning the Lens

Use a blower or a brush to remove dust on the lens, you should get a fingerprint on the Jens, soak a little alcohol or ether on lens cleaning tissue, then wrap the ti around a matchstick and wipe the lens lightly in a circ motion.